

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

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ENFORCEMENT & COMPLIANCE ASSURANCE DIVISION

September 18, 2019

Mark Larsen
Project Coordinator
ANCHOR QEA, LLC
1119 Pacific Avenue, Suite 1600
Tacoma, Washington 98402

Re: Bosma Lagoon Abandonments

Administrative Order on Consent ("Consent Order")

Docket No. SDWA-10-2013-0080 Yakima Valley Dairies, Washington

Dear Mr. Larsen:

EPA has completed our review of:

 H&S Bosma Dairy Lagoon Nos. 8, 9, 19, and 20 Lagoon Abandonment Completion Report (July 3, 2019)

Based on our review, EPA has these comments:

General Comments

- 1. There is a considerable number of sample data results in Appendix A which must be summarized along with the other soil data in the body of the report.
- 2. Add a section called "Disposition of Contaminated Soils." Describe the disposition of the large quantity of soil that was removed during the lagoon excavations and is currently stockpiled in the composting area.
- 3. Add a section entitled "Schedule". Describe the original due date for completing the lagoon abandonments (December 31, 2018), all the dates of Dairy extension requests and the reasons for them, the dates of EPA approval letters, and the date that the abandonment of each lagoon was confirmed by laboratory data. Provide the schedule for site restoration.

Specific Comments

1. Introduction

a. Add this sentence: "Appendix A contains all the laboratory soil data that was obtained during this lagoon abandonment project." Ensure that Appendix A is complete.

- b. Add text that states the total number of samples were collected and how many of these were analyzed in the laboratory vs. archived. The data sheets in Appendix A indicates that about 62 samples sent to lab, but only about 40 of these appear to have been analyzed by the lab. Describe this in the text of the report. Add a summary table of this information.
- c. Delete the paragraph that begins, "The lagoon abandonments exceed the requirements of Washington State Natural Resources Conservation Service..." The assertions in this paragraph are unsupported, not needed in this report, and would require a substantial investment of EPA resources to assess.
- 2. **Table 1 Approximate Lagoon Dimensions.** Add a column showing the approximate surface area, in acres, of each lagoon.
- 3. **Tables 2, 3, 4 and 5.** For each lagoon that was abandoned, add all the missing soil sample results that failed and preceded a sample result that passed. In the text that references these tables, add text that describes approximately how many feet of soil were removed prior to *each* soil sampling event.
- 4. Section 2.4.1. Lagoon 8. This section states that target nitrogen levels were achieved. This statement is overly broad. Modify the text to state that the sum of nitrate and ammonia met the target level. Modify similar statements in other sections regarding the other lagoons.
- 5. Section 2.5 Site restoration and future use. Add a drawing that shows the location and proposed discharge of the "new drainage system" that is described in the text. Show the drainage in relationship with the manure composting area and the new agricultural fields so that it is clear where the drainage from the manure composting area drains and discharges.
- 6. Section 3 Summary.
 - a. Add a table that shows, for all soil samples from each sampling location, the range of concentrations (of nitrate plus ammonia) that was detected.
 - b. Provide an estimate of the amount, in cubic yards, of soil removed from each lagoon.

The soil sampling results demonstrate compliance with the H&S Bosma Dairy Lagoon Nos. 8, 9, 19, and 20 Lagoon Abandonment Plan (August 29, 2018). Please proceed expeditiously to implement the final grading for the area as described in the design drawings in Appendix A of the Abandonment Plan. The regrading must be completed by December 31, 2019, but regrading and compaction before Fall rains will be more protective of the aquifer.

Pursuant to Paragraph 14 of the Consent Order, the report must be modified to address these comments and re-submitted to EPA by October 16, 2019.

You may contact me at (206) 553-6904, or your legal counsel may contact Jennifer MacDonald at (206) 553-8311, if you have any questions regarding this letter.

Sincerely,

Eric Winiecki

EPA Project Coordinator

Enforcement and Compliance Assurance Division

ce: Jennifer MacDonald Rene Fuentes